



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
JUNE 2, 2005 – 2:30 P.M.
UPTRAN CONFERENCE ROOM**

Present: L. Tibbits J. Friend J. Polasek
 B. J. O'Brien M. VanPortFleet J. D. Culp
 M. Chaput A. Clover T. Fudaly

Absent: J. W. Reincke C. Bleech E. Burns

Guests: B. Krom M. Bott G. Mayes (for J. Reincke)

OLD BUSINESS

1. Approval of the Minutes of the May 5, 2005, Meeting – L. Tibbits

The minutes of the May 5, 2005, meeting were approved.

2. Traffic and Safety Note 601A – Access Management (See August 5, 2004, Minutes, New Business, Item 3) – M. Bott

At the August 5, 2004, EOC meeting, the Traffic and Safety notes covering access management were presented. At that time, the committee agreed to review the notes and requests for further development, as needed, were made.

Mark Bott gave a short history and review of national studies regarding the impacts of roadside access on the operations and safety of a roadway. "Traffic and Safety Note 601A" was submitted to EOC for approval.

The committee believes the note is a good source for region/TSC use when meeting with local jurisdictions. Members agreed it would be a valuable tool when putting together project development plans.

ACTION: The committee approved Traffic and Safety Note 601A for distribution.

NEW BUSINESS

1. Procedures for Review and Approval of Draft Meeting Minutes – K. Reincke (B. O'Brien)

Brenda O'Brien discussed the current practice to review/approve EOC's meeting minutes and recommended the following revised procedure:

- A. The EOC Secretary's Administrative Assistant prepares the draft minutes and distributes them electronically to the meeting attendees for review and comment.
- B. The Administrative Assistant revises the draft minutes based on comments from the electronic review.
- C. The revised draft minutes are placed on the agenda for approval at the next meeting.
- D. After EOC approval, the Administrative Assistant finalizes the minutes for the Secretary's signature and distribution.

ACTION: The committee approved the revised procedure.

2. **Recommendation on New Signal Installation – Box Span Option – J. D. Culp and M. Bott**

Mark Bott discussed some of the major issues and installation cost elements relating to the box span signal layout. The committee requested more information regarding the cost differential when comparing the box span layouts to the department's current standard signal layout using diagonal span.

ACTION: The Traffic and Safety Support Area will further develop the costs elements and resubmit this item with a new recommendation.

3. **Pavement Selections – B. Krom**

A. **M-153 Reconstruction: CS 82081, JN 47066**

The reconstruction alternates considered were: Alternate 1 – a hot mix asphalt (HMA) pavement (Equivalent Uniform Annual Cost [EUAC] \$156,200/mile), and Alternate 2 - jointed plain concrete pavement (JPCP) (EUAC \$171,189/mile).

A life cycle cost analysis was performed and Alternate 1 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

2.0"	HMA, 4E10, Top Course (mainline)
3.0"	HMA, 3E10, Leveling Course (mainline)
3.0"	HMA, 3E10, Base Course (mainline)
6.0"	Open-Graded Drainage Course (mainline)
		Geotextile Separator
18.0"	Sand Subbase
6.0" dia	Open Graded Underdrain System
32.0"	Total Section Thickness

Present Value Initial Construction Costs	\$1,505,571/directional mile
Present Value Initial User Costs	\$863,519/directional mile
Present Value Maintenance Costs.....	\$391,410/directional mile
Equivalent Uniform Annual Cost	\$156,200/mile

B. I-94BL & I-94 Reconstruction: CS 77031 & 77111, JN 45758

The reconstruction alternates considered were: Alternate 1 – HMA pavement (EUAC \$105,479/mile), and Alternate 2 – JPCP (EUAC \$94,081/mile).

A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

Alternate 2 (37.23 Percent of the Project) Reconstruct: JPCP (I-94 BL)

9.0"	Jointed Plain Concrete Pavement w/14' jt spacing (mainline)
6.0"	Open Graded Drainage Course (mainline)
	Geotextile Separator
10"	Sand Subbase
6" dia	Open-Graded Underdrain System
25.0"	Total Thickness

Present Value Initial Construction Costs	\$1,228,721/mile
Present Value Initial User Costs	\$110,007/mile
Present Value Maintenance Costs.....	\$224,741/mile
Equivalent Uniform Annual Costs.....	\$80,802/mile

Alternate 2 (62.77 Percent of the Project) Reconstruct: JPCP (I-94)

11.0"	Jointed Plain Concrete Pavement w/15' jt spacing (mainline & shoulders)
6.0"	Open Graded Drainage Course (mainline & shoulders)
		Geotextile Separator
10"	Sand Subbase
6" dia	Open-Graded Underdrain System
27.0"	Total Thickness

Present Value Initial Construction Costs	\$1,363,859/mile
Present Value Initial User Costs	\$290,382/mile
Present Value Maintenance Costs.....	\$147,610/mile
Equivalent Uniform Annual Costs.....	\$101,956/mile

Combined Equivalent Uniform Annual Cost.....\$94,081/mile

4. **Traffic Control Technology Team – J. D. Culp**

The EOC acknowledged the existence of the Traffic Control Technology Team (TraCTT). This team is a multi-functional team to evaluate traffic signal technology. TraCTT will report to the Traffic Recommendation Committee. Team sponsors are J. D. Culp, Terry Anderson, and Brenda O'Brien (resource sponsor). Co-chairs are Joe Finch and Wendy Cloutier. Under the guidance of its sponsors, this team will develop

methodology and strategies to evaluate new and emerging signal technology to improve the safety and operational efficiency of Michigan's transportation system.

(Signed Copy on File at C&T)

André Clover, Acting Secretary
Engineering Operations Committee

AC:kar

cc:	G. J. Jeff	S. Mortel	J. Steele (FHWA)
	K. Steudle	D. Jackson	R. Brenke (ACEC)
	L. Hank	W. Tansil	G. Bukoski (MITA)
	EOC Members	D. Wresinski	R. J. Risser, Jr. (MCPA)
	Region Engineers	C. Libiran	D. Hollingsworth (MCA)
	TSC Managers	R. J. Lippert, Jr.	J. Becsey (MAPA)
	Assoc. Region Engineers	T. L. Nelson	M. Newman (MAA)
	T. Kratofil	T. Phillips	C. Mills (MPA)
	M. DeLong	K. Peters	J. Murner (MRPA)
	B. Kohrman	J. Ingle	G. Naeyaert (ATSSA)
	J. Shinn	C&T Staff	